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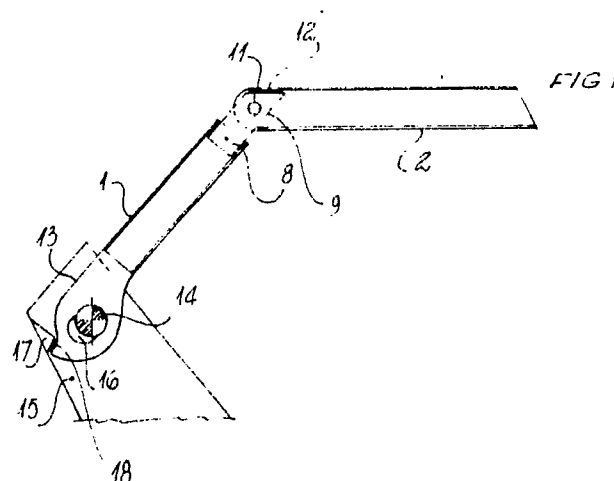
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54 **Folding chair arm for passenger transport vehicles.**

57 The supporting structure of the chair arm consists of two half-parts (1 and 2) in section iron, the second one of which has delimiting parts of the interposed side (4) of the other half-part (1) in order to determine, by means of a passing pivot (5), a rotating articulation on a vertical plane with blocking knobs (6) and interposed clutch-disks (7). The first half-part (1) shows an angled appendix (8) fitted in the profile section of the other one in order to allow two stopping positions. In order to bring the two half-parts into an axial prosecution, the second half-part (2) is shifted upwards. When the retention effect of the clutch-disks (7) is over, the lower part (9) of the angled appendix (8) beats on the inside wall (10) of the second half-part (2). On the contrary, by bringing this same part downwards, the upper wall (11) beats on the inside wall (12) of the second half-part (2). The arm shows the initial half-part (1) brought by the articulation part (13) with variable axle formed by pivot (14) which juts out from the side part (15) and set into eyelet (16) in stop condition by means of the side tooth (17) which beats on strip (18) of the articulation part (13). By pulling the arm outwards, the articulation (13) of base (18) is unhooked from the tooth (17) by gliding in eyelet (16) of pin (14), thus allowing to bring the arm downwards on the side.



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## Folding chair arm for passenger transport vehicles

The invention refers to an arm for passenger chairs to completely bring out from the operation area, thus allowing to completely free the room for both entering and coming out from the sitting position. Another feature of the invention device consists in foreseeing an arm with articulated half-parts and outside rotation on a vertical plain to allow two positions: one position with half-parts fitted in axial prosecution and another one with the second half-part brought downwards as to the initial half-part in order to form a rational leaning base for the forearm.

In passenger cars, the exigency is felt of rationalizing the sitting devices with a view to sparing the operational room and have comfortable seating means. In this connection, the chair arms can be noted that, in their conventional position with side excursion, are causing hindrance both in entering and getting out from the movement room foreseen for the sitting position. This compels to increase the width of this space, thus to widen the distance between the chairs. In order to obviate this inconvenience, a present device foreseen to turn up the arm, thus putting it on the same line of the seat back. In comparison with this system, the invention device carries out a construction simplifying, a better practicability and control with less physical strain.

The system according to the invention substantially uses an operating arm structure consisting of half-parts 1 and 2 in square profile steel connected in rotating articulation on a vertical plain, the second one of which with containing parts 3 for the interposed part 4 of the first half-part, and with through pin 5. To enable to block in position, knobs 6 have been foreseen and, for an adequate retention effect for the trim maintenance in the chosen use position, the two clutch disks 7 have been foreseen interposed in the articulation components. Half-part 1 shows the angled appendix 8 integral with it, in a triangular shape, fitted within the profile of the other one to allow two stop beating positions to the second half-part.

To bring the two arm-halfparts into axial prosecution, the half-part is shifted upwards up to the beating limit, and as soon as the retention effect has been overcome which is caused by the pair of disk-friction 7, the lower wall 9 of appendix 8 will beat on the inside wall 10 of the mobile half-part 2. When on the contrary, the mobile half-part 2 is brought downwards, the upper one 11 of appendix 8 will beat against the inside wall 12 of the second half-part 2.

The arm shows the initial half-part 1 supported by the articulation part 13 with changing axis, de-

termined by the pin 14 which is outboarding from side 15 and fitted into eyelet 16 in stopped condition by means of the tooth 17 of side which beats on base 18 of the articulation part 13. By pulling the arm outwards, through sliding into eyelet 16 of pin 14, the base 18 is unhooked, which is on the articulation part 13, from the tooth 17, thus allowing to bring the arm downwards on side 19 and thus releasing the side room for the access to the gangway.

An execution form is illustrated, in a merely indicative way, by the drawings of tables 1 and 2. With reference to table 1, fig. 1 is the lateral schematic view of the arm supporting structure in use position. The articulation body 13 can be noted, with changing axle, kept in position by the side tooth 17, thus allowing the disposition of the initial half-part 1 of the arm slanting upwards to keep the other half-part 2 in angled position to support the forearm of the sitting person. Fig. 2 is the view from above of the same structure supporting the chair arm as shown in fig. 1. Fig. 3 is the side view of the same operation assembly as per the previous figures, with the mobile half-part 2 brought axially with the other half-part 1. Fig. 4 is the view of the same operational whole, according to the previous figure, with the arm bearing structure on the side part 19, after releasing part 13 from tooth 17. In table 2, fig. 5 is the perspective view of the whole operational assembly with the arm leaning part 20 fitted in a continuous line for use condition, and dashed in an out-of-use one by means of its leaning part on piece 19 of the chair side.

In the executions, the components, the particulars, the materials, the shape and anything else in connection with the articulation and stop means, may be foreseen in different way.

## Claims

1) Folding chair arm for passenger transport vehicles, characterized by the fact that an arm bearing structure is used which consists of two half-parts (1 and 2) in square profile steel, connected in a rotating articulation on a vertical plane, the second half-part of which with containment parts (3) for the interposed one (4) of the first half-part and bound by means of a through pin (5). In order to allow blocking in position, knobs (6) are foreseen, and for a suitable retention effect of maintaining the chosen use position, the pair of clutch disks (7) is foreseen interposed in the joint components. The first half-part (1) shows the in-

tegral angled appendix (8) with a triangular shape, fitted into the profile of the other half-part in order to allow two beating stop positions to the second half-part (2). In order to bring both arm half-parts into axial prosecution, the second one (2) is shifted upwards up to the beating end, and as soon as the retention effect given by the friction clutch pair (7) has been overcome, the lower wall (9) of the angles appendix (8) will beat on the inside wall (10) of the mobile half-part (2). On the contrary if the upper wall (11) of the angled appendix (8) will beat on the inside wall (12) of the second half-part (2).

2) Folding chair arm for passenger transport vehicles, as per claim 1, characterized by the fact that the initial half-part (1) is supported by the articulation part (13) with changing axle determined by pin (14) outboarding from the side (15) and set in eyelet (16) with stop condition give by tooth (17) beating on base (18) of articulation part (13). By pulling the arm outwards, through sliding into the eyelet (16) of pin (14), the base (18) is released, which is on the articulation part (13), from tooth (17), thus allowing to bring the arm downwards on side (19) and to free the lateral space for the gangway access.

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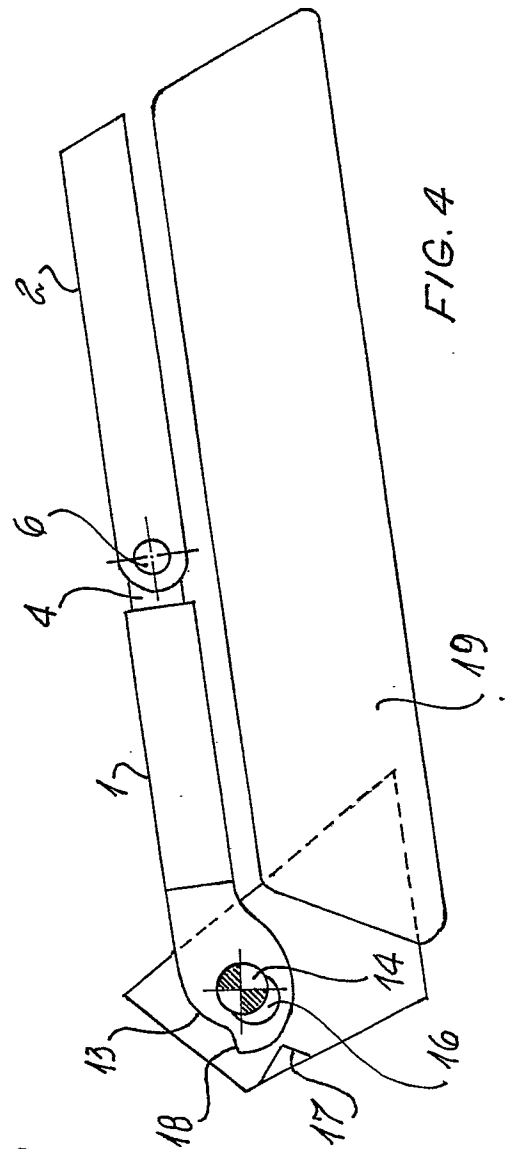
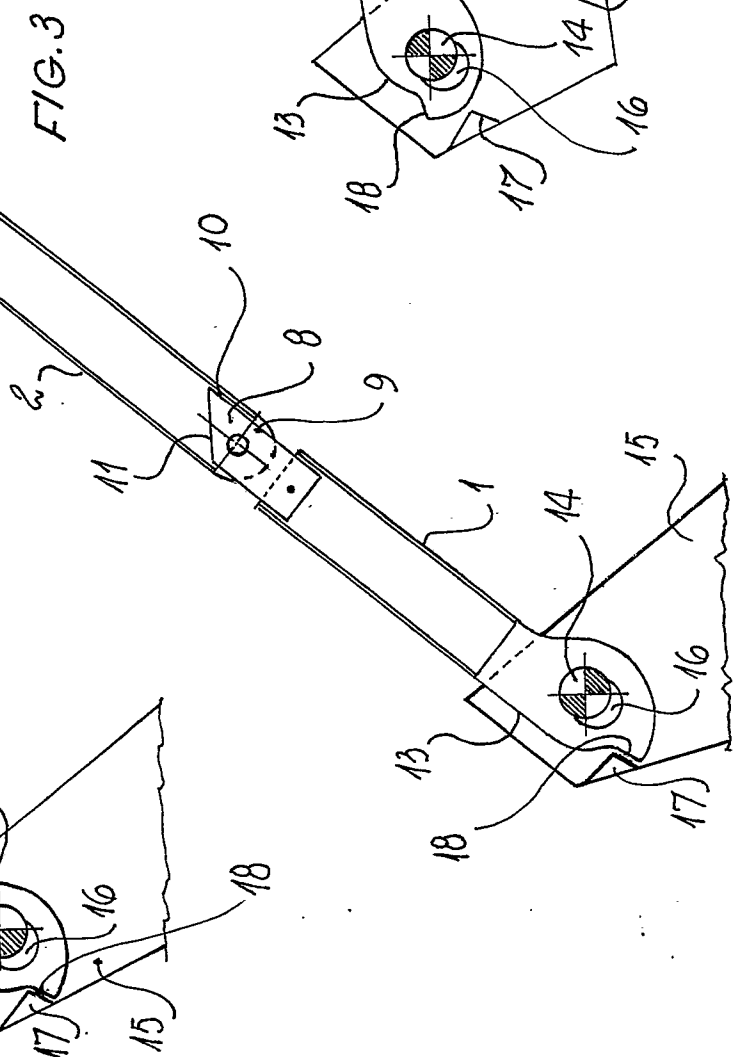
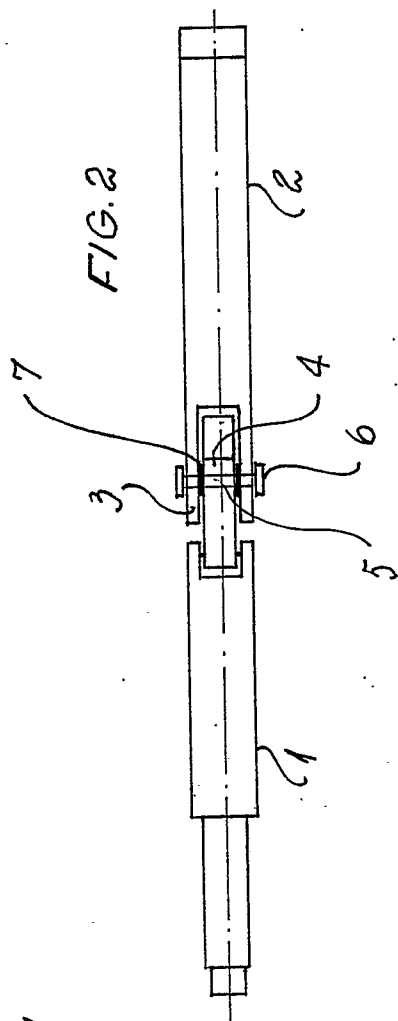
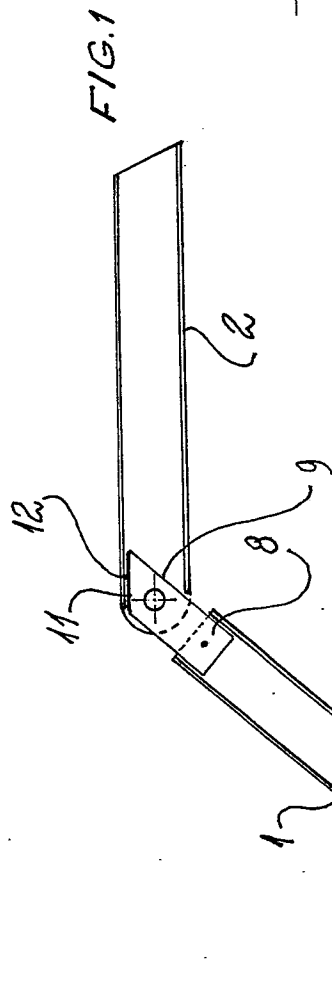
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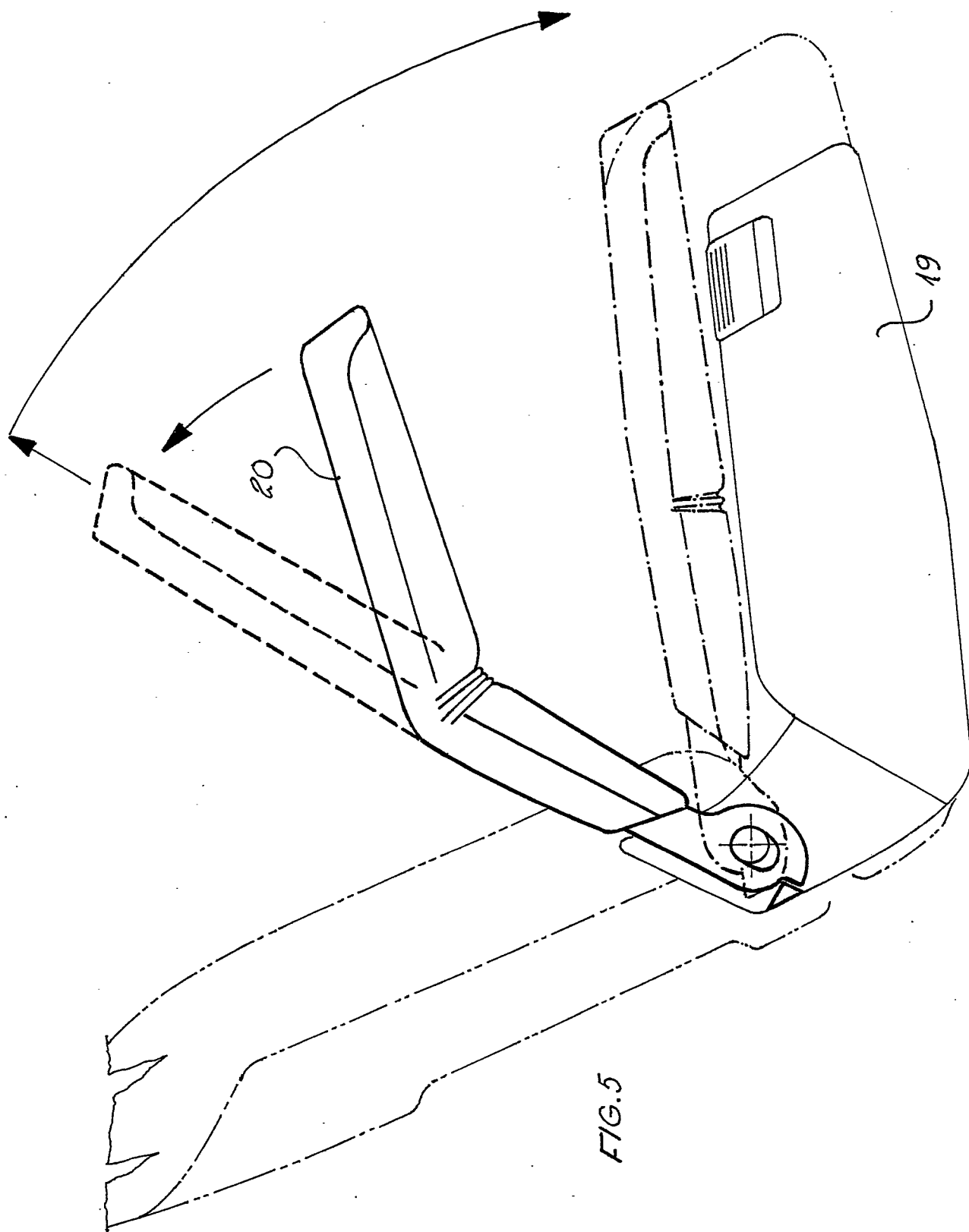
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	EP-A-0 278 651 (MT DESIGNS) * Column 3, line 37 - column 4, line 45; figures * ---	1	B 60 N 2/02
A	US-A-4 097 088 (MEILLER) * Column 3, line 47 - column 4, line 52; figures * ---	1	
A	US-A-4 496 190 (BARLEY) * Column 3, line 35 - column 4, line 47; figures * ---	1	
A	CH-A- 272 207 (HARTMANN) * Page 2, lines 19-51; figures * -----	2	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A 47 C 1/00 A 47 C 7/00 B 60 N 2/00
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28-04-1989	Examiner HORVATH R.C.
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